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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/200,179	11/25/1998	WALTER VIEGENER	834/39803	4534

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BARNES & THORNBURG
750-17TH STREET NW
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WASHINGTON, DC 20006

EXAMINER

DUNWOODY, AARON M

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 06/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/200,179

Applicant(s)

VIEGENER, WALTER

Examiner

Aaron M Dunwoody

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 9, 11 and 13-25 is/are pending in the application.
- 4a) Of the above claim(s) 3-5 and 13-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6, 9, 11 and 18-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 2 is objected to because of the following informalities:

Claim 2, line 3, change from "wherein the said" to "wherein said". Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 6, 9, 11 and 20-24 are rejected under 35 U.S.C. 102(e) as being anticipated by US patent 5695224, Grenier.

In regards to claim 1, Grenier discloses a non-detachable press fit arrangement between an end portion of a metal pipe (100) and a socket of a fitting (10), with the socket defining an interior space and being formed with an annular anchoring (15) groove facing the interior space for receiving a sealing ring (34), the press fit arrangement comprising at least one holding element (30, 32) resiliently secured to the socket in a receiving groove (13) and cold formed together with the socket, the holding element has a material penetrating component formed by a plurality of cutting arcuate projections pointing in the direction of the anchoring groove and whose ends penetrate

the metal pipe after cold forming, and wherein the annular anchoring groove is located in front of and separate from the receiving groove relative to the pipe end.

In regards to claim 2, Grenier discloses the socket being formed adjacent the anchoring groove for the sealing ring with an annular receiving groove facing the interior space for receiving the holding element, and wherein the material penetrating component is a cutting edge arranged about the circumference of the holding element and extending to the end portion of the metal pipe.

In regards to claim 6, Grenier discloses the holding element being mounted by way of a positive fit into the receiving groove.

In regards to claim 9, Grenier discloses the socket of the fitting having an outer peripheral surface formed with an engagement member selected from the group consisting of circumferential groove, lobes, ribs and circumferential fins for attachment of a press tool.

In regards to claim 11, Grenier discloses the socket of the fitting being substantially round after being compressed, with sealing forces and holding forces applied between the socket and the end portion of the metal pipe being substantially evenly distributed about the circumference of the metal pipe.

The method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight. In particular, fitting being substantially round after being compressed, with sealing forces and holding forces applied between the socket and the end portion of the metal pipe being substantially evenly distributed about the circumference of the metal pipe.

In regards to claim 20, Grenier discloses the sealing ring being a seal selected from the group consisting of lip seal, O ring or matched formed part.

In regards to claim 21, Grenier discloses the sealing ring having a relatively small cross section.

In regards to claim 22, Grenier discloses the interior space of the socket including a shoulder (24), which limits the amount of insertion of the pipe end, and the anchoring groove is between the shoulder and the receiving groove and spaced from the shoulder.

In regards to claim 23, Grenier discloses the receiving groove including two opposed walls, one of the walls limiting axial movement of the holding element away from the anchoring groove before insertion of the pipe end into the socket.

In regards to claim 24, Grenier discloses the projections forming one end of the holding element.

Claims 1, 2, 6, 9, 11 and 20-24 are rejected under 35 U.S.C. 102(e) as being anticipated by US patent 5722702, Washburn.

In regards to claim 1, Washburn discloses a non-detachable press fit arrangement between an end portion of a metal pipe (12) and a socket of a fitting (14), with the socket defining an interior space and being formed with an annular anchoring (36) groove facing the interior space for receiving a sealing ring (18), the press fit arrangement comprising at least one holding element (16) resiliently secured to the socket in a receiving groove (44) and cold formed together with the socket, the holding

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element has a material penetrating component formed by a plurality of cutting arcuate projections pointing in the direction of the anchoring groove and whose ends penetrate the metal pipe after cold forming, and wherein the annular anchoring groove is located in front of and separate from the receiving groove relative to the pipe end.

In regards to claim 2, Washburn discloses the socket being formed adjacent the anchoring groove for the sealing ring with an annular receiving groove facing the interior space for receiving the holding element, and wherein the material penetrating component is a cutting edge arranged about the circumference of the holding element and extending to the end portion of the metal pipe.

In regards to claim 6, Washburn discloses the holding element being mounted by way of a positive fit into the receiving groove.

In regards to claim 9, Washburn discloses the socket of the fitting having an outer peripheral surface formed with an engagement member selected from the group consisting of circumferential groove, lobes, ribs and circumferential fins for attachment of a press tool.

In regards to claim 11, Washburn discloses the socket of the fitting being substantially round after being compressed, with sealing forces and holding forces applied between the socket and the end portion of the metal pipe being substantially evenly distributed about the circumference of the metal pipe.

The method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight. In particular, fitting being substantially round after being compressed, with sealing forces

and holding forces applied between the socket and the end portion of the metal pipe being substantially evenly distributed about the circumference of the metal pipe.

In regards to claim 20, Washburn discloses the sealing ring being a seal selected from the group consisting of lip seal, O ring or matched formed part.

In regards to claim 21, Washburn discloses the sealing ring having a relatively small cross section.

In regards to claim 22, Washburn discloses the interior space of the socket including a shoulder (34), which limits the amount of insertion of the pipe end, and the anchoring groove is between the shoulder and the receiving groove and spaced from the shoulder.

In regards to claim 23, Washburn discloses the receiving groove including two opposed walls, one of the walls limiting axial movement of the holding element away from the anchoring groove before insertion of the pipe end into the socket.

In regards to claim 24, Washburn discloses the projections forming one end of the holding element.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 6, 9, 11, 18-21, 23 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent 2225208, Crickmer.

In regards to claim 1, Crickmer discloses a non-detachable press fit arrangement between an end portion of a metal pipe (10, 11) and a socket of a fitting (12), with the socket defining an interior space and being formed with an annular anchoring (22)

groove facing the interior space for receiving a sealing ring (23), the press fit arrangement comprising at least one holding element (21) resiliently secured to the socket in a receiving groove (17) and cold formed together with the socket, the holding element has a material penetrating component formed by a plurality of cutting arcuate projections pointing in the direction of the anchoring groove and whose ends penetrate the metal pipe after cold forming, and wherein the annular anchoring groove is located in front of and separate from the receiving groove relative to the pipe end.

In regards to claim 2, Crickmer discloses the socket being formed adjacent the anchoring groove for the sealing ring with an annular receiving groove facing the interior space for receiving the holding element, and wherein the material penetrating component is a cutting edge arranged about the circumference of the holding element and extending to the end portion of the metal pipe.

In regards to claim 6, Crickmer discloses the holding element being mounted by way of a positive fit into the receiving groove.

In regards to claim 9, Crickmer discloses the socket of the fitting having an outer peripheral surface formed with an engagement member selected from the group consisting of circumferential groove, lobes, ribs and circumferential fins for attachment of a press tool.

In regards to claim 11, Crickmer discloses the socket of the fitting being substantially round after being compressed, with sealing forces and holding forces applied between the socket and the end portion of the metal pipe being substantially evenly distributed about the circumference of the metal pipe.

The method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight. In particular, fitting being substantially round after being compressed, with sealing forces and holding forces applied between the socket and the end portion of the metal pipe being substantially evenly distributed about the circumference of the metal pipe.

In regards to claim 18, Crickmer discloses the holding element having a hardness exceeding a hardness of the metal pipe.

In regards to claim 19, Crickmer discloses the holding element being made of a special steel.

In regards to claim 20, Crickmer discloses the sealing ring being a seal selected from the group consisting of lip seal, O ring or matched formed part.

In regards to claim 21, Crickmer discloses the sealing ring having a relatively small cross section.

In regards to claim 23, Crickmer discloses the receiving groove including two opposed walls, one of the walls limiting axial movement of the holding element away from the anchoring groove before insertion of the pipe end into the socket.

In regards to claim 24, Crickmer discloses the projections forming one end of the holding element.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18, 19 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grenier.

In regards to claims 18 and 19, Grenier discloses the claimed invention except for the holding element having a hardness exceeding a hardness of the metal pipe or the holding element being made of special steel. It would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the holding element with a hardness exceeding a hardness of the metal pipe or fabricating the holding element from a special steel, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

In regards to claim 25, Grenier discloses the claimed invention except for the socket being dimensioned to receive pipes having an insider diameter of greater than 54 millimeters. It would have been an obvious matter of design choice to dimension the socket to receive pipes having an insider diameter of greater than 54 millimeters, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Claims 18, 19 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Washburn.

In regards to claims 18 and 19, Washburn discloses the claimed invention except for the holding element having a hardness exceeding a hardness of the metal pipe or the holding element being made of special steel. It would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the holding element with a hardness exceeding a hardness of the metal pipe or fabricating the holding element from a special steel, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

In regards to claim 25, Washburn discloses the claimed invention except for the socket being dimensioned to receive pipes having an insider diameter of greater than 54 millimeters. It would have been an obvious matter of design choice to dimension the socket to receive pipes having an insider diameter of greater than 54 millimeters, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

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Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Crickmer.

In regards to claim 25, Crickmer discloses the claimed invention except for the socket being dimensioned to receive pipes having an insider diameter of greater than 54 millimeters. It would have been an obvious matter of design choice to dimension the socket to receive pipes having an insider diameter of greater than 54 millimeters, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Response to Arguments

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

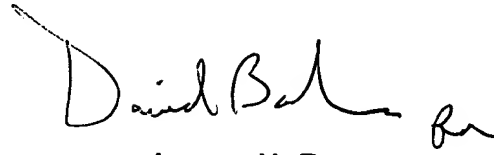
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M Dunwoody whose telephone number is (703) 306-3436. The examiner can normally be reached on Monday - Friday between 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H Browne can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9327 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

.amd
June 15, 2003

A handwritten signature in black ink, appearing to read "Lynne H. Browne", with a stylized flourish at the end.

Lynne H. Browne
Supervisory Patent Examiner
Technology Center 3670